

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the current application:

Listing of the claims.

Claim 1 (Currently Amended) A method for detecting the alignment of document in an automatic document feeder ~~[[,]]~~ comprising ~~the steps of:~~

Step A: providing an optical scanner having an automatic document feeder ~~and a document,~~ the automatic document feeder having a colored pattern layer in ~~corresponding to a scanning window of the optical scanner,~~ the document ~~has~~ having at least one side edge; ~~[[,]] and when the document is fed into the automatic document feeder, the side edge is just located between the scanning window and the colored pattern layer;~~

Step B: actuating the automatic document feeder to feed in the a document~~[[,]]~~ to a first position;

capturing a first image ~~retrieval is made for the~~ of the document while the document is in said first position; ~~placed on the scanning window;~~

Step C: feeding the document to a second position; ~~an appropriate length of the document is fed in;~~

Step D: a capturing a second image ~~retrieval is made for the~~ of the document placed on the scanning window while said document is in said second position; and

~~Step E: calculating a slant value is calculated out from the result of~~ by comparing the first image retrieval ~~and with~~ the second image retrieval.

Claim 2 (Currently Amended) The method for detecting the alignment of a document in an automatic document feeder of claim 1, wherein the color of the colored pattern layer ~~in step A~~ is different from that of the document.

Claim 3 (Currently Amended) The method for detecting the alignment of a document in an automatic document feeder of claim 1, wherein the side edge in ~~step A~~ is substantially parallel to the feeding direction of the document, ~~fed into the automatic document feeder.~~

Claim 4 (Currently Amended) The method for detecting the alignment of a document in an automatic document feeder of claim 1, wherein a first distance ~~of the first image retrieval is~~ comprises a distance ~~retrieved~~ from the side edge to a reference point positioned in the colored pattern layer.

Claim 5 (Currently Amended) The method for detecting the alignment of a document in an automatic document feeder of claim 4, wherein a second distance ~~of the second image retrieval is~~ comprises a distance ~~retrieved~~ from the side edge to the reference point after ~~an appropriate length~~ a length sufficient to enable measuring of said slant value is fed in.

Claim 6 (Currently Amended) The method for detecting the alignment of a document in an automatic document feeder of claim 4, wherein the reference point is positioned on a scan line of the scanning window.

Claim 7 (Currently Amended) The method for detecting the alignment of a document in an automatic document feeder of claim 5, wherein the slant value ~~in step E~~ is comprises a ratio ~~[[for]]~~ of the difference value of the first distance and the second distance versus to the appropriate length a length sufficient to enable measuring of a slant value.

Claim 8 (Currently Amended) The method for detecting the alignment of a document in an automatic document feeder of claim 7, wherein the slant value ~~in step E~~ is calculated by an electronic calculation device.

Claim 9 (Currently Amended) The method for detecting the alignment of a document in an automatic document feeder of claim 8, wherein the electronic calculation device comprises is a software calculation program.

Claim 10 (Currently Amended) The method for detecting the alignment of a document in an automatic document feeder of claim 8, wherein the electronic calculation device further comprises ~~[[is]]~~ a calculator in a computer ~~executing scanning job~~.

Claim 11 (Currently Amended) The method for detecting the alignment of a document in an automatic document feeder of claim 1, ~~wherein after the step E,~~ further comprising the steps of:
Step F: comparing the slant value with a preset value.

Claim 12 (Currently Amended) The method for detecting the alignment of a document in an automatic document feeder of claim 11, wherein the preset value ~~in step F~~ comprises a value that is tested and provided for the document ~~appropriately fed into the scanning area~~ a length sufficient to enable measuring of a slant value.

Claim 13 (Currently Amended) The method for detecting the alignment of a document in an automatic document feeder of claim 11, ~~wherein after the step F,~~ and further comprising the steps of:

Step G: scanning the document if in response to the slant value being [[is]] smaller than the preset value, ~~scanning the document is begun.~~

Claim 14 (Currently Amended) The method for detecting the alignment of a document in an automatic document feeder of claim 11, ~~wherein after the step F,~~ and further comprising: the steps of:

Step H: terminating scanning in response to if the slant value [[is]] being larger than the preset value, ~~scanning the document is stopped.~~

Claim 15 (Currently Amended) The method for detecting the alignment of a document in an automatic document feeder of claim 14, ~~wherein after the step H,~~ and further comprising: the steps of:

~~Step H1: taking out the document out of the document feeder, and repeating the method of claim 1 step B through step E.~~

Claim 16 (Currently Amended) The method for detecting the alignment of a document in an automatic document feeder of claim 15, wherein said taking the document out of the document feeder further comprises manually wherein the step of taking out the document out of the document feeder. in step H1 is made by a manual method.

Claim 17 (Currently Amended) The method for detecting the alignment of a document in an automatic document feeder of claim 13, ~~wherein after the step H, and further comprising the steps of: Step H2: setting off an alarm.~~

Claim 18 (New). A method comprising:

automatically feeding a document into an optical scanner to place the document in a first position;
capturing a first image while said document is in said first position;
automatically feeding the document into an optical scanner to place the document in a second position;
capturing a second image while said document is in said second position; and
determining a slant value based, at least in part, on a comparison of the first image with the second image.

Claim 19 (New). The method of claim 18, and further comprising arranging a colored pattern in or near a scanning window of the optical scanner

Claim 20 (New). The method of claim 19, wherein the color of the colored pattern is different from that of the document.

Claim 21 (New). The method of claim 20, and further comprising positioning a first edge of the document between the scanning window and the colored pattern.

Claim 22 (New). The method of claim 21, and further comprising measuring a first distance between the first edge and a reference point positioned in the colored pattern.

- Claim 23 (New).** The method of claim 22, and further comprising measuring a second distance between the first edge and the reference point positioned in the colored pattern.
- Claim 24 (New).** The method of claim 23, wherein the reference point is positioned on a scan line of the scanning window.
- Claim 25 (New).** The method of claim 23, and further comprising determining the slant value based, at least in part, on a ratio of a difference between the first distance and the second distance to the second length.
- Claim 26 (New).** The method of claim 25 wherein the second length comprises a length determined sufficient to determine the slant value.
- Claim 27 (New).** The method of claim 18, wherein the slant value is calculated by an electronic calculation device.
- Claim 28 (New).** The method of claim 27, wherein the electronic calculation device further comprises a software calculation program.
- Claim 29 (New).** The method of claim 27, wherein the electronic calculation device comprises a calculator in a computer executing scanning job.
- Claim 30 (New).** The method of claim 18, and further comprising comparing the slant value with a preset value.
- Claim 31 (New).** The method of claim 30, wherein the preset value comprises a value that is tested and provided for the document appropriately fed into the scanning area.
- Claim 32 (New).** The method of claim 30, and further comprising continuously scanning in response to the slant value being smaller than the preset value.
- Claim 33 (New).** The method of claim 30, and further comprising terminating a scanning operation in response to the slant value being larger than the preset value.
- Claim 34 (New).** The method of claim 33, and further comprising repositioning the document.
- Claim 35 (New).** The method of claim 33, and further comprising setting off an alarm.